The Elements of Learning Activity Design

Identities: preferences, needs, motivations
Competences: skills, knowledge, abilities
Roles: approaches to learning and participation
learner(s)

specific interaction of learner(s) with other people, using specific tools and resources, oriented towards specific
learning
environment
Tools, resources, artefacts
Affordances of the physical and virtual environment for learning

learning activity
Other people involved and the specific role they play in the interaction e.g. support, mediate, challenge, guide
other(s)

learning outcomes
New knowledge, skills and abilities
Evidence of this, and/or artefacts of the learning process

Learning activity

The first principle of design for learning is that all learning involves some form of activity. Learning activities can be defined as ‘specific interactions of learners with other people, using specific tools and resources, oriented towards specific outcomes’.

♦ Activities do not have to be ‘designed’ by a teacher. In the early stages learners need tasks that are carefully structured and paced. Over time they should take increasing responsibility for their own learning activities, just as the activities of reading and writing or driving a car, once learned, become second nature and a matter of personal ‘style’.

♦ Different learners may approach the same task very differently, an example of how learning cannot be fully ‘designed’ in advance. A well-designed task will allow learners to approach the activity in different ways, while working towards the same outcomes.

♦ In real-world activities, the four elements are mutually inter-dependent. The task given, the roles played by participants, the ways in which tools and resources are used, and the outcomes produced – all these emerge in the course of the activity itself.

♦ However, when planning or evaluating learning activities, it can be helpful to consider these elements separately. Learners’ needs and learning outcomes will always need to be considered. Other issues likely to require decisions are: What kinds of activity will it be useful for learners to engage in? What content resources are available? Which e- and m-technologies are likely to be advantageous? How will learners be supported and given feedback? What degree of autonomy and what degree of collaboration is appropriate?

Consider each element in turn, and how decisions about this are typically made in your context of work.
Learning outcome(s)

A learning outcome is some identifiable change that is anticipated in the learner.

Consider:

♦ What is the purpose behind the learning activity?
♦ Where does it fit in the learners’ overall experience of the course/module/session?
♦ What new knowledge, skills and/or attitudes will learners gain?
♦ How will they know when they have achieved the outcome, and how well they are doing?
♦ How will they finally be assessed? Are the assessment criteria clear and relevant?
♦ How could the learning process could be captured, to support progression and reflection?

How would you define intended outcomes in your own context of work?

Common usage might be based on course documentation, on accepted good practice in your discipline or profession, or on an educational taxonomy such as Bloom’s or Marten’s. Desired outcomes are likely to be expressed in the form: learners will be able to...

Learner(s)

Learners have stable or slowly-changing characteristics such as their identities, lifelong motivations and experiences of learning, physical and sensory access requirements, and related personal preferences e.g. for particular kinds of information. But learners also have characteristics that develop in the process of learning, and that are dependent on the context in which they find themselves. Even quite fundamental characteristics can be expressed differently in response to a new stimulus.

Consider learners’:

♦ needs, including physical and sensory access requirements
♦ motives for learning, and expectations of the course
♦ prior experience of learning
♦ social and interpersonal skills
♦ subject-specific experience, knowledge and competence
♦ confidence and competence in the use of ICT
♦ preferred approaches to learning and to participation in learning

What do you need to know about your own learners, and how do you find out?
Environment

The environment is taken to include available resources and tools, as well as other features that have a capacity to support learning. For example, the lay-out of a seminar room has an influence on the interactions that take place there, while different kinds of learning are clearly possible in a fieldwork situation or an authentic workplace.

Resources are designed to deliver specific content. They may be provided by the teacher or discovered by the learner. Tools are designed to be used in the context of a specific task.

Consider:

♦ What aspects of the environment (e.g. field, seminar room, library) support the learning?
♦ What resources will learners have access to? What resources could they find themselves?
♦ What technologies will learners have available for use? What technologies of their own could they use?
♦ How will these resources and tools support the learning activity? What advantages do they have over other options?
♦ Do learners have functional access to the tools, resources and learning environment? How will their access needs and developing skills be supported?

What environmental considerations are important in your context of work?

Other people*

Most learning involves some form of dialogue with other people, and all learning is potentially collaborative: for some learners this will be the preferred approach. Therefore the involvement of others must always be considered in the design of a learning activity.

Consider:

♦ What is the role of the tutor in this activity? Is there a role for other experts or mentors?
♦ How will learners interact with one another? What use is being made of their existing skills and competences? What are the opportunities for peer learning and collaboration?
♦ Who will give feedback to learners on their progress?
♦ What facilities and support services are there, and how will these be used?

How are dialogue, collaboration, and tutor interaction valued in your context of work?

* This aspect of the model has been added to earlier versions to acknowledge the critical role of the teacher/practitioner, of mentors and of other learners, which were emphasised in consultation. Even with no planned outcome, and no resources or tools to work with, learning can still take place through dialogue with others.
**Basic principles of effective design**

*Constructive alignment:*
- ♦ of learning tasks and assessment criteria with the desired outcomes
- ♦ of learning tasks, resources and technologies with the needs and preferences of learners

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<thead>
<tr>
<th>People learn more effectively when:</th>
<th>So it makes sense to:</th>
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<tr>
<td>They are active</td>
<td>♦ Base learning around tasks with the emphasis on learner activity</td>
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<td>They are motivated and engaged</td>
<td>♦ Establish desired outcomes for each activity</td>
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<td>♦ Relate these to learners’ long-term goals</td>
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<td>Their existing capabilities are brought into play</td>
<td>♦ Revisit prior knowledge and skills at outset</td>
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<td>♦ Exploit learners’ existing capabilities e.g. in collaborative work, shared knowledge-building</td>
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<td>They are appropriately challenged</td>
<td>♦ Aim for learners’ zone of proximal development</td>
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<td>♦ Provide support and scaffolding (peer, tutor or resource-based)</td>
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<td>♦ Give options for learners with different capabilities and preferences</td>
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<td>They have opportunities for dialogue</td>
<td>♦ Establish opportunities for dialogue with tutors, mentors and peers during the task</td>
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<td>♦ Foster and reward collaboration as well as autonomy</td>
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<td>They receive feedback</td>
<td>♦ Ensure all tasks and outcomes receive feedback</td>
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<td>♦ Design tasks to give intrinsic feedback if possible</td>
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<td>♦ Consider peer feedback as an alternative to tutor feedback</td>
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<td>They have opportunities for consolidation and integration</td>
<td>♦ Encourage further practice (e.g. alternative tasks)</td>
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<td>♦ Record outputs and processes of learning so learners can ‘see’ how they are performing</td>
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<td>♦ Promote skills of reflection and planning (e.g. through portfolios, individual tutorial support)</td>
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What (other) design principles do you apply in your context of work?